

LBNE “Weekly” Status Report
14 October 2010
J. Strait, Project Manager

CD-1 Document Preparation

CDR

- Volume 1 - *Overview and Science*: This volume continues to be edited. The attempt is to present a set of Science goals, but needing to keep an eye on what the actual configuration of the project will end up being. It may need iteration as the project scope evolves with the understanding of the cost estimates.
- Volume 2 - *Neutrino Beamline*: Complete draft posted on 16 September for the Project Manager’s review of the beamline (20-22 September). A new draft will be released in a few weeks, incorporating comments and recommendations from the review. Requirements documents are being generated as well.
- Volume 3 - *Near Detector*: Complete draft posted 29 September for the Project Manager’s review of the near detector (4-5 October). Work has begun on incorporating the input from the review.
- Volume 4 - *Water Cherenkov Detector*: Complete draft posted on 17 September for the Project Manager’s review of the water Cherenkov Detector (27-29 September). Work will begin on incorporating the input from the review, once the final report is issued (see below).
- Volume 5 - *Liquid Argon TPC*: First draft with content for all chapters posted on 29 September. Complete draft must be posted at least a week in advance of the Project Manager’s review of the LAr TPC, scheduled for 1-3 November.
- Volume 6 - *Conventional Facilities at Fermilab*: Last complete draft dated 28 July. Continuing to working on requirements document, drawing updates, which will form the basis of the next draft. The WBS and WBS dictionary being finalized. The next draft will be posted by 27 October, in advance of the Project Manager’s review of Conventional Facilities (3-5 November).
- Volume 7 - This is being assembled from: parts of the DUSEL PDR, which is under intense development, reports from Jacobs regarding underground facilities, report from Arup regarding rock waste handling, due October 31, and a report from HDR regarding the surface facilities, due October 31. In addition, a conventional facilities requirements document is being developed for the liquid argon (LAr) facilities. It will be difficult to pull together a complete CDR draft before the Project Managers review of Conventional Facilities that has been scheduled for November 3-5.

Alternative Analysis A complete draft has been submitted to DOE, comments have been returned, and these have been incorporated into a new draft. It summarizes the alternatives for proton source, baseline, far site and far detector configurations and shows the far detector capability for 2+0, 1+1, and 0+2, Water Cherenkov and Liquid Argon Modules. Discussions continue with DOE as to how best to incorporate discussion of siting options.

Acquisition Plan A template has been distributed to each Level 2 manager, requesting 2-3 pages describing how they plan to acquire major pieces of their sub-projects. Drafts for each subproject are being developed using information from the CDR, and other information developed for the subproject reviews. It is planned to have a complete draft by mid-November.

Key Assumptions Documents The draft Key Assumptions document will be split into a set of documents one or more covering the project as a whole, and others for each of the Level 2 subprojects, in order to improve our ability to manage the development of this (now family) of documents. A “Key Assumptions: Physics Research Goals of the LBNE Project” has been drafted, circulated to DOE, Fermilab Management, and the Collaboration Executive Committee. Comments from the latter body have been included in a new draft completed on 13 October.

Preliminary Project Management Plan Information is slowly being added, and is awaiting review by the Project Manager. Subproject specific information has been solicited from all Subproject Managers to include in associated areas of the PMP..

DUSEL-LBNE MOU Writing assignments for many sections were made in a meeting on 2 September between DUSEL and LBNE Project Offices. A preferred mode of funding flow from DOE to DUSEL to support LBNE conventional facilities work has been agreed among DUSEL and LBNE management and the DOE site office, and will be presented to the JOG Working Group today. We are starting to plan the next “face-to-face” meeting between DUSLE and LBNE to push towards completing the MOU.

Risk Management Plan A reasonably complete draft exists, but it needs to be updated to incorporate the idea of an external Risk Review Panel, to supplement the internal Risk Management Board. The Project plans to have a first meeting of the Risk Management Board this week. In this meeting we hope to establish what will constitute an external independent Risk Board and establish timelines for Risk Assessments as well as a first pass on documented risks. This information will be incorporated into the Risk Management Plan.

Risk Assessment I am continuing gathering risk assessments from Sub-Projects and working with them to document accurate assessments. The Risk Manager is working with the Project Controls Lead to incorporate schedules into the risk software for risk ties and preliminary analysis. Next week there will be formal training from the vendor on application of the risk software.

QA Plan Advanced draft presented to Director’s Review in July. Little progress since then. It is awaiting input from the Project Manager.

Preliminary Hazard Assessment Continuing to gather data from each of the subprojects for development of the Preliminary Hazard Assessment. Developing the Draft Preliminary Fire Protection & Life Safety Assessment document. Incorporating ES&H requirements into the Conventional Facilities Requirements document. Continuing to review cryogenic safety issues and evaluate requirements for the Near Detector Hall.

NEPA Strategy A date is being sought that agreeable to all of the key participants for a Scoping Meeting for the LBNE EA. The current best guess is that this will take place in mid-December.

Preliminary Resource Loaded Schedule Each subproject has been developing its own RLS in its own format, and we are now working towards a common scheme. The format and content of a standard BOE form is being reviewed. Individual sub-project RLS are being reviewed as part of the series of Project Manager's Level 2 reviews.

Staffing

Project Controls The project controls team is fully staffed, with one person assigned to each subproject, and an overall lead, for a total of six. Four of these, including the Lead, are contractors. Three candidates for a staff position Project Controls Lead are scheduled for the week of 25 October.

Beam Level 2 Project Engineer Our candidate, Michael Campbell, has accepted our offer and is scheduled to start on November 1.

LAr Cryogenics and Cryostat Level 3 Manager Barry Norris of the Fermilab Technical Division (TD) has begun work on this job, backed up by additional cryogenic engineering from TD. Since this position has been filled, this is the last week we will report on it.

CF Far Site Level 3 Manager Advertisement to fill this position were posted on 12 October, and we are awaiting resumes. Currently David Taylor of DUSEL is serving in an acting role. However, DUSEL may need to divert a substantial fraction of his time to other work. We have initiated discussions with FESS about getting short-term help until we can fill this position.

Computing Coordinator Eileen Berman of the Fermilab Computing Division has begun to serve in this role, initially on a part-time basis. Since this position has been filled, this is the last week we will report on it.

Reviews

A Project Manager's Conceptual Design, Cost and Schedule Review of the Neutrino Beamline was held on 20-22 September at Fermilab. The review web page is http://lbne.fnal.gov/reviews/beam_review.shtml. The final review report is posted at <http://lbne2-docdb.fnal.gov:8080/cgi-bin/ShowDocument?docid=2769>.

A Project Manager's Conceptual Design, Cost and Schedule Review of the Water Cherenkov Detector was held on 27-29 October at BNL. The review web page is http://lbne.fnal.gov/reviews/WCD_review.shtml. The review report will be posted by the end of this week at <http://lbne2-docdb.fnal.gov:8080/cgi-bin/ShowDocument?docid=2799>.

A Project Manager's Conceptual Design, Cost and Schedule Review of the Near Detector was held on 4-5 October at LANL. The review web page is

http://lbne.fnal.gov/reviews/ND_review.shtml. The review report is posted at <http://lbne2-docdb.fnal.gov:8080/cgi-bin/ShowDocument?docid=2822>

A Project Manager's Conceptual Design, Cost and Schedule Review of the Liquid Argon TPC is scheduled for 1-3 November at Fermilab, and the review committee is in place except for one member who is still being sought. A web page will be created and populated with the Volume 5 of the CDR and other relevant information at least a week before the review.

A Project Manager's Conceptual Design, Cost and Schedule Review of LBNE Conventional Facilities is scheduled for 3-5 November at Fermilab, and the review committee is in the process of being formed, with four members lined up so far.

Other Events

A Project Management Team "retreat" is being planned for the beginning of the week of 15 November.

A briefing for DOE/OHEP by the LBNE Project is scheduled for 30 November in Germantown.

A list of recent and future LBNE-related reviews, meetings and other important events is posted at <http://lbne.fnal.gov/calendar-events.shtml>.